SIEMENS

MOBILETT XP Digital

SP

Maintenance Protocol

System

incl. DHHS

Customer:	
Address:	
Department:	
Room:	
Contact person:	
Telephone:	
Cust. specific no.:	
Cust. no.:	
Date.:	

The instructions SPR8-230.831.30.03.02 are required for this protocol

Print No.: SPR8-230.832.30.03.02
Replaces: SPR8-230.832.30.02.02

English
Doc. Gen. Date: 11.05

SIEMENS Office:	
Address:	
Region:	
Country:	
Contact person:	
Tel.:	
CSE in charge:	
Tel.:	

Remarks Regarding the Protocol:

The protocol is valid as proof of quality for **one** check that must be performed on the system / component in one year.

The check must be performed in the specified intervals.

The results of the check are entered in this protocol.

The chapter numbers in front of the checkpoints indicate the corresponding chapters in the particular instructions (see cover page).

The protocol must be completely filled out by the Customer Service Engineer, i.e.:

- All boxes must be filled out. If a box does not apply to the system or if no entry needs to be made, check the “n.a.“ box.
- Enter the customer number (Cust. No.:) and the date of the check in the header of each page so that each page can be allocated to a customer and to a check date.
- If there are complaints, the IVKs for the component about which a complaint has been made as well as the type of complaint must be entered in the “Open Points“ table provided for this. Correction of these open points also must be documented in this table with the date and a signature. If there are no open points, check “No“ and document this with the date and a signature.
- If movable components (also test phantoms that are part of the system) that can be used in different systems are used for the check, they must be entered in the “Movable Components“ table provided for this.
- The measurement values for the measurements that must be performed during the check must also be entered in the open spaces / tables provided for them.
- After completing the check, Page 3 of this protocol must be filled out and signed.

Further Processing and Archiving of the Protocol

The protocol is a document and thus must be archived. After completing the test, it must be filed in the corresponding register in the “System Owner Manual“ binder. If needed, a copy can be handed to the customer.

System:	
Serial No.:	
Software Version:	
Number of the Service Contract:	
Type of Maintenance:	

Evaluating the Condition of the System / Component

The system has no deficiencies. The image quality test resulted in no differences from required reference values.	☐
The system / component has slight deficiencies that have no affect on continued operation of the system. However they should be corrected preventively. The image quality test resulted in no differences from required reference values.	☐
The system / component has serious deficiencies. For safety reasons, continued operation of the system is permitted only after successfully correcting the deficiencies.	☐

After completing all work steps, an evaluation was performed.

Signature: _____

Date: Name:

The operator or a person assigned for this has taken note of this evaluation.

(if national regulations require this)

Signature: _____

Date: Name:

Explanation of Abbreviations in the Protocol

Abbrev.	Explanation		Abbrev.	Explanation
SI	Safety Inspection		PMF	Preventive Maintenance, Operating Value Check, Function Check
SIE	Electrical Safety Inspection		Q	System Quality, Image Quality
SIM	Mechanical Safety Inspection		QIQ	Image Quality
PM	Preventive Maintenance		QSQ	System Quality Check
PMP	Periodic Preventive Maintenance		SW	Software Maintenance
PMA	Preventive Maintenance Adjustments		CSE	Customer Service Engineer

Additional activities performed

Only activities that are not described in the instructions for the system / component need to be listed.

	Date:		
Additional activities performed:	OK	not OK	n.a.
	☐	☐	☐
	☐	☐	☐

Open Points:

Yes: ☐ No: ☐ Signature: _____

Date: Name:

If “Yes“, enter the component with the IVK and the open point (only the number) in the table. After completing maintenance, record this in the table.

IVK	Component	Open Points	Completed	
			Date	Signature

Measuring Devices queried electronically:

Yes: ☐ No: ☐ Signature: _____

Date: Name:

If the measurement devices are queried electronically, for example with a Scout Mobile Device, entry of the measuring devices in the table can be skipped.

Measuring Devices	Type	Serial No.	Date Used	Next Calibration Due

Movable Components:

Yes: ☐ No: ☐ Signature: _____

Date: Name:

If “Yes“, enter the movable component with which the check was performed along with the with the Serial No. in the table.

Movable components (also test phantoms that are part of the system) are parts that can be used on different systems).

Component	Serial No.

			OK	not OK	n.a.
1		**General**			
2		**General maintenance information**			
3		**Inspection and maintenance**			
3.1		**Visual check**			
	SIM	Signs	☐	☐	☐
	SI	Customer documentation	☐	☐	☐
3.1.1		**Damage**			
	SIM	Covers	☐	☐	☐
	SIM	Detector and detector holder	☐	☐	☐
	SIM	Control panel and display panel	☐	☐	☐
	SIM	Release cable	☐	☐	☐
	SIM	Single tank	☐	☐	☐
	SIM	Collimator	☐	☐	☐
	SIM	DAP (optional)	☐	☐	☐
	SIM	Remote control (optional)	☐	☐	☐
3.2		**Mechanical inspection**			
3.2.1		**Back wheels and support rollers**			
3.2.1.1		**Back wheels**			
	SIM	Brake pad	☐	☐	☐
	SIM	Drive belt	☐	☐	☐
	SIM	Secure attachment	☐	☐	☐
	SIM	Smooth rotation	☐	☐	☐
3.2.1.2		**Support rollers**			
	SIM	Secure attachment	☐	☐	☐
	SIM	Smooth rotation	☐	☐	☐
3.2.2		**Front transport wheels**			
	SIM	Secure attachment	☐	☐	☐
	SIM	Smooth rotation	☐	☐	☐
3.2.3		**Brakes**			
	SIM	Uniformity	☐	☐	☐
	SIM	Braking force	☐	☐	☐
3.2.4		**Support arm transport lock**			
	SIM	Checking transport lock	☐	☐	☐
	SIM	Locking mechanism	☐	☐	☐
3.2.5		**Handles**			
	SIM	Attachment	☐	☐	☐

			OK	not OK	n.a.
3.2.6	**Collimator adjustment knobs**				
SIM	Attachment		☐	☐	☐
3.2.7	**Arm system and single tank**				
3.2.7.1	**Moving the arm system**				
SIM	Moving the arm system		☐	☐	☐
SIM	Moving the single tank holder		☐	☐	☐
SIM	Moving the single tank		☐	☐	☐
3.2.7.2	**Arm system attachment**				
SIM	Screws and lock nuts		☐	☐	☐
3.2.7.3	**Arm connector**				
SIM	Screws and nuts		☐	☐	☐
3.2.7.4	**Adjusting screw and cantilever**				
SIM	Lock nuts		☐	☐	☐
SIM	Attaching the base		☐	☐	☐
3.2.7.5	**Cable harness for the arm system**				
SIM	Undamaged		☐	☐	☐
3.2.8	**Single tank holder**				
SIM	Holder screw connections		☐	☐	☐
SIM	Single-tank screw connections		☐	☐	☐
3.2.9	**Power cable**				
PMP	Cable winch replacement		☐	☐	☐
	Start-up date/date of last replacement:	. . DD MM YYYY			
SIM	Checking the power cable		☐	☐	☐
SIM	General cable winch information		☐	☐	☐
PMP	Cleaning		☐	☐	☐
3.2.9.1	**Power plug**				
SIM	Checking the power plug		☐	☐	☐
3.2.10	**Lubrication**				
PMP	Pull-bar slide bushing		☐	☐	☐

3.3 Function inspection

3.3.1	**Operating data**				
3.3.1.1	**Reading out the operating information**				
PMF	Exposure counter		☐	☐	☐
	Measured value:				

		OK	not OK	n.a.
PMF	Error memory	☐	☐	☐
3.3.2	**Displaying the control panel**			
PMF	Mains display	☐	☐	☐
PMF	kV/mAs default values	☐	☐	☐
SIE	kV/mAs segment displays	☐	☐	☐
PMF	Ready indicator	☐	☐	☐
SIE	kV/mAs displays according to operating instructions	☐	☐	☐
3.3.3	**Checking the radiation indicator**			
SIE	Radiation indicator	☐	☐	☐
SIE	Ready indicator	☐	☐	☐
SIE	Acoustic signal	☐	☐	☐
3.3.4	**Manual termination of exposure**			
SIE	“ERR 39” display	☐	☐	☐
SIE	Acoustic signals	☐	☐	☐

3.4 Collimator

3.4.1 Lamp replacement

PMP	Annual replacement of the collimator lamp	☐	☐	☐

Start-up date/date of last replacement: . .

DD MM YYYY

PMF	Light localizer function	☐	☐	☐

3.4.2 Checking the illuminance

PMF	Illuminance	☐	☐	☐

Measured value:

3.4.3 Light field/radiation field

QSQ	Deviation ((A + C) / SID)	☐	☐	☐

Measured value:

QSQ	Deviation ((B + D) / SID)	☐	☐	☐

Measured value:

3.5 Battery and motor drive inspection

3.5.1 Batteries

PMF	Charging performance	☐	☐	☐

Start-up date/date of last replacement: . .

DD MM YYYY

			OK	not OK	n.a.
3.5.2	**Motor drive**				
PMF	Forward/backward		☐	☐	☐
PMF	Slow/fast		☐	☐	☐
3.6	**Options**				
3.6.1	**DAP measuring system**				
SIE	Function of the DAP measuring system		☐	☐	☐
3.6.2	**Remote control**				
PMP	Battery replacement for remote control (yearly)		☐	☐	☐
SIE	Remote control function		☐	☐	☐
3.7	**Checking the kV/mAs exposure parameters**				
3.7.1	**kV accuracy**				
PMF	kV accuracy 52 kV, 50 mAs		☐	☐	☐
	Measured value:				
PMF	kV accuracy 81 kV, 20 mAs		☐	☐	☐
	Measured value:				
PMF	kV accuracy 133 kV, 12.5 mAs		☐	☐	☐
	Measured value:				
3.7.2	**mAs accuracy**				
PMF	kV accuracy 40 kV, 5 mAs		☐	☐	☐
	Measured value:				
PMF	kV accuracy 81 kV, 2 mAs		☐	☐	☐
	Measured value:				
PMF	kV accuracy 133 kV, 10 mAs		☐	☐	☐
	Measured value:				
3.8	**Reproducibility test (USA only)**				
QSQ	Determine coefficient of variation C.		☐	☐	☐
	Measured value:				

		OK	not OK	n.a.
3.9	**Checking the image quality**			
3.9.1	**Dose measurement**			
QIQ	Dose measurement	☐	☐	☐
3.9.2	**Resolution**			
QIQ	Resolution	☐	☐	☐
3.9.3	**Contrast**			
QIQ	Contrast	☐	☐	☐
3.9.4	**Hardcopy**			
QIQ	Hardcopy	☐	☐	☐
3.10	**Protective conductor test**			
SIE	Protective conductor test	☐	☐	☐
3.11	**Leakage current measurement**			
SIE	Leakage current measurement	☐	☐	☐
3.12	**Patient leakage current measurement**			
SIE	Patient leakage current measurement	☐	☐	☐
3.13	**Cleaning**			
PMP	Cleaning	☐	☐	☐